

With such a diet we restore the mother as soon as possible to a normal state and avoid some of the disagreeable consequences of a starvation diet that were formerly met with.

GANGRENOUS ULCERATIONS.

AFFECTING THE FACE, INCLUDING THE LIDS OF BOTH EYES AND DESTROYING THE EYEBALLS—THE RESULT OF BITES BY A MAN.

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Carrie L., colored, 24 years of age, living in Fairfax County, Virginia, was admitted to the Emergency Hospital on April 22, 1898, with the following history: Eight days before, at 2 A.M., she had been attacked by her husband in a fit of madness. He

and two or three still smaller ones on the nose and upper lip. On removing the scabs covering the eyes, after softening them in hot boric acid solution, it was found that the edges of both lids of the right eye had been eaten away for their entire length, that the conjunctiva of both the eyeball and the lids had been destroyed, and the cornea had an ulceration occupying two-thirds of its surface and extending through its entire thickness, through which the iris had prolapsed. On the left side the destruction was even more extensive. The whole of the outer halves of both lower and upper lids were involved in an ulceration which extended down on the cheek and temporal region, covering a space of three by four inches. The destruction was more profound than on the right side, going deep into the tissues of the orbit and reaching to the bone at the lower outer portion. The whole of the anterior half of the globe, including a portion of the sclera, was gone. The surface of the ulcers was covered with a most foul-smelling, greenish decomposing matter.



Figure 1.

stripped off her clothing and proceeded to bite her and claw her with his fingernails about the face and upper portion of her body, especially the chest, abdomen and back. She was found in an exhausted state by her neighbors in the morning and placed under the care of a local physician. Her condition, especially as to the injuries on the face, not improving, she was sent to the Emergency Hospital, where I saw her on the evening of April 22. I found both eyes entirely covered with a thick scab composed, as it seemed, partly of iodoform and partly of gangrenous tissue. There was a large phagedenic ulcer, with undermined edges, on the right cheek, three and one-half by two inches, involving the entire thickness of the skin, a smaller one near the angle of the mouth



Figure 2.

The bites on the body were nearly all far advanced toward perfect healing, and these wounds seemed not to have taken on the phagedenic character of those of the face.

All the dead matter was carefully dissected from the surface of the ulcers, until healthy tissue was reached. In the left orbit this necessitated the evisceration of the contents of the eyeball and the cutting away of some portions of the tendons of the external muscles of the eye, and a removal of a large part of the orbital tissue. Fig. 1 gives a very good idea of the appearance after the wounds had been cleansed. After this thorough cleansing, the surfaces were covered with iodoform gauze and a protective bandage applied. An examination was made of the gangrenous

material and the discharge, but no unusual micro-organisms were found, those present being the staphylococcus pyogenes aureus and albus.

At the end of the first twenty-four hours she had a sudden rise of temperature to 106 F. This subsided in a few hours to practically the normal, at which it remained during the rest of her stay in the hospital. Under a nourishing diet and simple dressings of iodoform gauze, the healing went forward rapidly, and at the end of two weeks she was able to leave the hospital for her home. The condition was then as is represented in Fig. 2. There was total symblepharon on both sides, and the inside of the lids was everywhere adherent to the walls of the orbits. The resulting cicatrices on the face are much smaller than was to be expected from such extensive ulceration.

Having heard legends of the poisonous character of the bite of the "blue-gum" negro, I made inquiries as to that quality in her husband, but it was most indignantly denied by the wife.

In this case it is hardly possible to determine whether the extensive ulcerations on the face were due to some poisonous quality in the bites or scratches, or to the condition of the patient at the time, or to the want of treatment at the beginning. It is worthy of note that the bites on the abdomen and back, made at the same time, healed with promptness, and, supposedly, under the same treatment as that given to the wounds of the face, and that when the wounds of the face were put in an aseptic state they also healed well and rapidly. It was expected that some virulent micro-organism would be found in the discharge, possibly a form of streptococcus, but a careful search brought none to light. The general health of the patient at the time of her discharge was excellent.

ETIOLOGY OF ECLAMPSIA.*

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It would seem as if some apology was necessary for again presenting to the society a paper on the etiology of eclampsia after the subject had been so exhaustively discussed by the eminent essayist of a year ago, but the great importance of the subject and a desire that the society may use its opportunities to experiment and investigate in a new direction is sufficient justification.

The year has brought forth some new material which is extremely suggestive and of great interest in this connection. The etiologic agents which have been so thoroughly discussed and rediscussed are doubtless familiar to all, and will receive no mention further than the statement that for the purpose of this paper all phenomena in connection with the brain, ureters and urine, to which hitherto etiologic importance has been attributed, are not to be regarded as etiologic factors, but only as results or at most as of accessory importance.

It is evident at the outset that this statement does not harmonize with many currently received opinions on this subject, but I hope to show with some plausibility that a different doctrine is at least entitled to earnest consideration.

The preponderating significance of the blood and circulatory apparatus as carriers attracts the attention to the theory which seems to me to present the greatest degree of inherent probability to-day—a toxemia, with a possible predisposing cause in hereditary irritability of the nervous system; a condition of the blood induced by the circulation therein of a poison or poisons, the nature of which is at present undetermined. It is not uric acid, it is not creatin, but it is known that there is excreted by the urine a toxin as yet unseparated (Fultz and Ritter, confirmed by Bouchard) which may upon final isolation and analysis be found to be this poison from the circulation, probably a leucomain of the uric acid group.

It is believed that the source of this toxin is in the uterine metabolism. This opinion, supported by the investigations of Lange, from whom extensive quotations will be made later, follows from a logical examination of the general conditions associated with eclampsia. It is well established that eclampsia only occurs during pregnancy and the puerperium. The system of the eclamptic, therefore, is the same as before pregnancy with the one exception of the growing uterus and its contents. Only such metabolic product then can be considered as occurs either entirely in pregnancy or in much greater quantities than in other persons.

The fetal origin of the toxin is well supported by such names as Chrobak, Potter, Byers, Kollman and many others, but to establish this position it is necessary to show a direct connection with the fetus in utero and aside from the difficulty, if not (at present at least) the impossibility, of doing this, all of the conditions would not be fulfilled, as for instance in the postpartum cases. It seems more probable that either the uterus or placenta or both conjoined are the responsible sources of the toxin. The placental metabolism is not yet sufficiently understood to be considered in this connection more than to refer to its possibly great importance (Schmorl) in the alteration of the maternal blood by some coagulating substance. Gynecologists have long recognized tachycardia during the presence of fibroids, and why is it not possible that the active, proliferating muscle cells in the growing uterus should develop a metabolic product which may produce systemic effects, and as in some cases of fibroid a distinct myocardial degeneration sometimes ending fatally (Riesman)? The large size of the uterus is not the cause of the eclamptic attack, for this condition is found in other states of the organism where eclampsia does not occur, as in the large fibroid and ovarian tumors.

It was shown by Winckel, and confirmed recently by Byers and Morisani, that when the fetus dies in utero, even when the premonitions of eclampsia are present, the danger is greatly diminished, if not entirely removed, and when the child is living and premature labor is induced, the attacks usually cease. The inference is that when uterine activity is abolished the possibility of an attack is greatly diminished.

This is further supported by the fact that attacks occur more frequently among pluriparae, which is due not to distension nor to the presence of one or more additional ova, but results directly from the necessarily increased uterine metabolism.

Perrochet closely approximates the above conditions when he attributes the cause of the eclampsia to a poisoning of the blood (through metabolic pro-

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